Dell’s PowerEdge C platforms focus on solving hyperscale data center challenges, with problem solving innovation, streamlined feature sets, and extensively proven performance and efficiency.

Optimized for scale-out workloads such as cloud, high performance computing, Web 2.0, hosting, and big data - not recommended for standard enterprise applications such as ERP and CRM.
PowerEdge C Servers
Problem-solving innovation for proven performance and hyper-efficiency at scale

For cloud builders, high performance computing shops, telcos/hosters Web 2.0 and big data applications, Dell PowerEdge™ C platforms focus on solving hyperscale data center challenges, with problem solving innovation, streamlined feature sets, and extensively proven performance and efficiency.

Proven effectiveness: PowerEdge C platforms are based on proven technologies the Dell Data Center Solutions group has delivered to some of the world’s largest hyperscale data centers looking for an IT competitive edge. Get that edge. Take advantage of that experience, and the investment those companies have made in collaborative custom-design for performance and efficiency at scale.

Problem-solving innovation: One size does not fit all. DCS starts by listening to customer challenges/needs and then custom-designs platforms to solve those challenges and meet those needs. The result: entirely new categories of servers such as microservers, and hyperscale servers, right-sized for your workloads, and your environment.

Efficiency: PowerEdge C servers have higher performance per watt, performance per U and performance per dollar than its closest competitor. Designed for performance and efficiency, PowerEdge C servers have a shared infrastructure: sharing chassis, fans and power supplies across up to four server nodes in a 2U to lower TCO by approximately 20%.

Data Center Solutions: custom designs and delivers IT for some of the world’s largest search engine and cloud computing providers. For DCS, it all starts with you. Your unique challenges. Your unique environment. It’s collaborative problem solving innovation, with designs proven at hyperscale. Get a competitive edge with some of those custom designs more widely available in the PowerEdge C line, right-sized for scale-out performance and efficiency.
The PowerEdge C Series

**PowerEdge C1100**
2-socket, quad and six-core, 1U rack server. Ideal for scale-out power and space-sensitive data centers requiring maximum memory flexibility.

**PowerEdge C2100**
2-socket, quad and six-core, 2U rack server. Ideal for scale-out data center environments with critical memory and storage density requirements.

**PowerEdge C6100**
Ultra-dense 2U shared infrastructure, the Dell PowerEdge C6100 supports up to 4 independent server nodes, providing capacity, performance and flexibility in a very dense eco-friendly package.

**PowerEdge C6105**
A 4-node 2U shared infrastructure AMD® Opteron 4100® series processor-based hyperscale server designed to maximize performance per watt per dollar.

**PowerEdge C6145**
One of the highest performing servers ever, with two 4-socket AMD Opteron 6200 series processor-based servers in a hyper-efficient 2U; with 10 PCIe slots to ramp up expansion possibilities.

**PowerEdge C410x PCIe expansion chassis**
A 3U external PCI Express expansion chassis, the Dell PowerEdge C410x connects 1-8 servers to 1-16 PCIe devices to get results faster, while saving on space, weight and cost.

**PowerEdge C6220**
The next generation of the PowerEdge C6100, this compact 2U shared infrastructure is designed for performance, density and flexibility, supporting 1 to 4 independent server nodes.

**PowerEdge C6240**
The next generation of the PowerEdge C6100, this compact 2U shared infrastructure is designed for performance, density and flexibility, supporting 1 to 4 independent server nodes.
### Dell PowerEdge Cloud Servers

Optimized for scale-out application environments such as HPC, cloud, Web 2.0, hosting, and big data - not recommended for standard enterprise applications such as ERP and CRM.

<table>
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<tr>
<th>Description</th>
<th>Form Factor</th>
<th>Features</th>
<th>Processor(s)</th>
<th>RAM PER NODE (min/max)</th>
<th>PCI slots</th>
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<th>Availability Features</th>
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<tbody>
<tr>
<td>C6220</td>
<td>2x 2-socket, 2U rack mount</td>
<td>2x memory over previous Intel® generations</td>
<td>4- or 6-core Intel® Xeon® Processor 5600 Series</td>
<td>Up to 192GB (18 DIMM slots): 2GB/4GB/8GB 16GB DDR3, 1066MHz or 1333MHz</td>
<td>3 PCIe G2 slots: 1 x 16 PCIe Express Gen2 slot, 1 proprietary mezzanine for dual port 10GBE daughtercard, 1 proprietary mezzanine for LS1 2008 SAS daughtercard</td>
<td>LSI® 2008 SAS daughtercard PERC H800</td>
<td>Intel 82576 - 2 x Gb Ethernet and 1 x 100Gb Ethernet dedicated management port</td>
<td>10 x 2.5” or 4 x 3.5” hot-plug hard drive options; high-efficiency single or redundant power supplies; Linux and Windows® OS; Citrix®, VMware® and Microsoft® hypervisor</td>
<td></td>
</tr>
<tr>
<td>C6100</td>
<td>2x 2-socket, 2U rack mount</td>
<td>2x memory over previous Intel® generations</td>
<td>4- or 6-core Intel® Xeon® Processor 5600 Series</td>
<td>Up to 192GB (18 DIMM slots): 2GB/4GB/8GB 16GB DDR3, 1066MHz or 1333MHz</td>
<td>4 PCIe G2 slots: 2 x 8 PCIe Express Gen2 slots, 1 proprietary mezzanine for dual port 10GbE Ethernet daughtercard, 1 proprietary mezzanine for LS1 2008 SAS daughtercard</td>
<td>LSI® 2008 SAS daughtercard PERC H800</td>
<td>Intel 82576 - 2 x Gb Ethernet and 1 x 100Gb Ethernet dedicated management port</td>
<td>12TB SATA, 12TB NL, or 6Gb SAS</td>
<td>24 x 2.5” or 12 x 3.5” hot-plug hard drive options; high-efficiency single or redundant power supplies; Linux and Windows OS; Citrix, VMware and Microsoft hypervisor</td>
</tr>
<tr>
<td>C1100</td>
<td>4 x 2-socket (Intel) in a 2U rack mount</td>
<td>2x density of traditional 1U servers 50% more storage than comparable HP servers Shared infrastructure uses less floor space, power and cooling Service individual nodes to increase uptime by up to 75%</td>
<td>4- or 6-core Intel® Xeon® Processor 5600 Series Quad-core Intel® Xeon Processor 5500/5600 Series</td>
<td>Up to 192GB (12 DIMM slots): 4GB/8GB/16GB DDR3, 1066MHz or 1333MHz</td>
<td>1 PCIe x 8 mezzanine daughtercard slot and x16 riser slot Optional: Mellanox® ConnectX-4 40GbE/s dual-port QDR IB adapter</td>
<td>LSI 2008 SAS mezzanine</td>
<td>Intel 82576 - 2 x Gb Ethernet and 1 x 100Gb Ethernet dedicated management port</td>
<td>26TB SATA or 38TB NL SAS</td>
<td>24 x 2.5” or 12 x 3.5” hot-plug hard drive options; high-efficiency 470W/750W/1100W/1400W power supply options; Linux and Windows OS; Citrix, VMware and Microsoft hypervisor</td>
</tr>
<tr>
<td>C6100</td>
<td>4 x 2-socket (Intel) in a 2U rack mount</td>
<td>Intel’s latest 2S performance processors Component and power efficiency improvements save up to 100W per chassis, while boosting performance per watt up to 43% better than the previous generation according to Dell lab tests</td>
<td>Up to 512GB (16 DIMM slots): 4GB/8GB/16GB DDR3 2400MHz</td>
<td>1 PCIe x 8 mezzanine daughtercard slot AND 1 x16 PCIe Express Gen 3 (4-node configs) OR 2 x16 PCIe Express Gen 3 (2-node configs)</td>
<td>Intel C620 integrated controller (optional) LSI 2008 SAS mezzanine</td>
<td>LSI® 2008 SAS daughtercard VRTx®</td>
<td>Intel 82576 - 2 x Gb Ethernet and 1 x 100Gb Ethernet dedicated management port</td>
<td>24TB SATA or 36TB NL SAS</td>
<td>24 x 2.5” or 12 x 3.5” hot-plug hard drive options; high-efficiency single or redundant power supplies; Linux and Windows OS; Citrix, VMware and Microsoft hypervisor</td>
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Dell PowerEdge C Servers Portfolio Guide
## Dell PowerEdge Cloud Servers (cont.)

Optimized for scale-out application environments such as HPC, cloud, Web 2.0, hosting, and big data - not recommended for standard enterprise applications such as ERP and CRM.

<table>
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<tr>
<th>Servers for Scale-out Environments</th>
<th>Description</th>
<th>Form Factor</th>
<th>Features</th>
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<tr>
<td>C410x</td>
<td>2 x 4-language expansion chassis, the Dell PowerEdge C410x connects 1-8 servers to 1-16 PCIe devices to get results faster, while saving on space, weight and cost</td>
<td>16 PCIe slots in 3U rack mount</td>
<td>Up to 21 TFLOPs in 3U</td>
<td>8, 12 or 16 cores per processor AMD Opteron 6200 processor series, 128 cores</td>
<td>Up to 512GB (32 DIMM slots): 4GB/8GB/16GB DDR3, 1333MHz</td>
<td>1 PCIe x8 mezzanine daughter card slot and x16 riser slot</td>
<td>Optional: Mellanox ConnectX-2 40Gb/s dual-port QDR IB adapter</td>
<td>Intel 82559 dual-port 10GbE adapter</td>
<td>LSI 2008 6Gb SAS mezzanine (optional)</td>
<td>Embedded dual port Intel Kawela™ 82576</td>
</tr>
<tr>
<td>C6105</td>
<td>One of the highest performing servers ever, with two 4-language AMD Opteron 6200 series processor-based servers in a hyper-efficient 2U, with 10 PCIe slots to ramp up expansion possibilities</td>
<td>2 x 4-language (AMD) in 2U rack mount</td>
<td>2x the performance and density of a traditional 2U</td>
<td>Up to 281% more performance per U compared the HP ProLiant DL980 G7, in a quarter of the rack space?</td>
<td>Up to 192GB (12 DIMM slots): 2GB/4GB/8GB/16GB DDR3, 1333MHz</td>
<td>1 PCIe x 8 mezzanine daughter card slot and x16 riser slot</td>
<td>Optional: Mellanox ConnectX-2 40Gb/s dual-port QDR IB adapter</td>
<td>Intel 82559 dual-port 10GbE adapter</td>
<td>LSI 2008 6Gb SAS mezzanine</td>
<td>2 embedded Intel® Kawela™ 82576</td>
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Microservers

**PowerEdge C5000 Chassis**
Up to 12 single-socket servers fit in this 3U rack chassis. It’s ideal for scale-out power and space-sensitive environments, designed for those looking to increase revenue per square foot in their data centers.

**PowerEdge C5125 Microserver**
Up to 12 hot-swap AMD-processor-based server nodes in a 3U rack server. Ideal for dedicated hosting, Web 2.0, content delivery networks (CDN), and other applications that are not very compute intensive or complex, yet benefit from compute density and power efficiency.

**PowerEdge C5220 Microserver**
Up to 8-12-node Intel-processor-based shared infrastructure 3U. This microserver provides 4x the density with 75% less to cool. Designed for relatively lightweight workloads such as virtualized hosting and CDN, the PowerEdge C5220 8-sled version has a mezzanine card slot for SAS drives, hardware RAID, or an extra dual port 1GbE NIC.

**SeaMicro™ SM10000-64 Microserver**
The SeaMicro SM10000-64 integrates 512 Intel Atom low-power cores (256 dual-core Intel x86-64), top of rack (TOR) Ethernet switching, server management, and application load balancing in a single 10U “plug and play” Rack in a Box™ for Web 2.0 environments.

**Microservers defined**
Server System InfrastructureSM Forum (SSI), a leading server industry group that drives server form factor standards, released the Micro Module Server Specification to help enable innovative system architectures to reduce product costs and increase product and data center efficiencies.

“The micro server segment is an emerging category that is generally characterized by scale-out, single-socket, entry-level servers designed for lower power consumption, improved density, and better efficiencies through resource sharing. It is targeted for cost-effective Web services, including entry dedicated hosting and fixed function web servers such as static Web page serving,” according to the **SSI Forum Specification**.

**Experience you can trust**
Dell Data Center solutions (DCS) custom builds servers, solutions and modular data centers, servers, and provides custom services for some of the world’s largest search engines and cloud service providers. This experience has given the DCS team insights into the unique challenges of the hyperscale computing environments and what it takes to design, build and deploy hyper-efficient data center solutions. Dell DCS has the in-depth expertise to right-size and tune your data center solution for performance and efficiency. Dell DCS leveraged its expertise, custom designs, and the company’s supply chain in PowerEdge C servers, cloud and big data solutions.
### Microservers for Scale-out Environments

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<tr>
<td>PowerEdge C5125</td>
<td>3U rack mount</td>
<td>4x density with 75% less to cool than traditional 1U servers. Cold-aisle accessible, hot-swap high-efficiency 1400W power supplies and server nodes simplify serviceability and lower total cost of ownership. This microserver is right-sized for your workload and your wallet with value-priced AMD processors and shared infrastructure to maximize efficiency.</td>
<td>2- or 4-core AMD Phenom™ II X4, Athlon™ II X4/X2</td>
<td>Up to 16GB (4 DIMM slots): 2GB/4GB DDR3, 1333MHz</td>
<td>N/A</td>
<td>8 hot-swap PCIe mezz card slot available on the 8-sided version</td>
<td>AMD 82576EB</td>
<td>4TB SATA</td>
<td>Up to 12 single-socket AMD or Intel processor-based server nodes (sleds) with 4 x 2.5” or 2 x 3.5” hard drive options; BMC with IPMI 2.0 support with 1 x 10/100 Mbps RJ45 connector for dedicated management, or 1 x NIC port shared.</td>
</tr>
<tr>
<td>PowerEdge C5220</td>
<td>Up to 12 x 1-socket (AMD) in 3U rack mount</td>
<td>4x the density with 75% less to cool, 4x less floor space, cabling, racks compared to traditional 1U servers. This microserver is right-sized for your workload and your wallet with value-priced AMD processors and shared infrastructure to maximize efficiency.</td>
<td>2- or 4-core Intel Xeon E3-1200 Series or Core i3-2120</td>
<td>Up to 32GB (4 DIMM slots): 2GB/4GB/8GB DDR3, 1333MHz</td>
<td>N/A</td>
<td>LSI 2008 or Intel 82580DB dual-port 1GbE adapter (optional)</td>
<td>Intel C204</td>
<td>4TB SATA or 6TB NL SAS</td>
<td>4-12 single-socket server node sleds; 4 x 2.5” or 2 x 3.5” hard drive options; Linux and Windows OS; Citrix, and Microsoft Hyper-V.</td>
</tr>
<tr>
<td>PowerEdge C5220</td>
<td>3U rack mount</td>
<td>Micro in size, without compromise, the PowerEdge C5220 microserver has Intel E3-1200 processors. Its shared infrastructure results in 4x the density with 75% less to cool, 4x less floor space, cabling, racks compared to traditional 1U servers.</td>
<td>2- or 4-core Intel Xeon E3-1200 Series or Core i3-2120</td>
<td>1 x 8 PCIe mezz card slot available on the 8-sided version</td>
<td>Intel C204</td>
<td>4TB SATA or 6TB NL SAS</td>
<td>4-12 single-socket server node sleds; 4 x 2.5” or 2 x 3.5” hard drive options; Linux and Windows OS; Citrix, VMware, and Microsoft Hyper-V.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM10000-64</td>
<td>256 processors (Intel) in a 10U rack mount</td>
<td>1/4 the power, takes up 1/4 the space, uses fewer racks and switches compared to the best-in-class volume server, without requiring modifications to existing software. The industry’s first Rack in a Box,™ the SM10000-64 server’s shared infrastructure can significantly lower total cost of ownership.</td>
<td>S12 cores per system, Intel N570 1.66GHz dual-core, dual-thread x86-64 processor</td>
<td>Up to 4GB SODIMM, 1TB DRAM, 1 Terabit per second fabric</td>
<td>8 hot-swap PCIe cards with 8 ports each card for up to 64 Ethernet interfaces</td>
<td>10/100/1000BaseT with RJ45 ports</td>
<td>Embedded system software for management, RFC compliance, integrated terminal server, IPv4 protocols and SNMP MIB support</td>
<td>64 physical disks with 8 hot-swap storage cards, 2.5” hot-swap HDD or SSD up to 1TB each</td>
<td>8-64 Ethernet interfaces; 0-64 physical disks; 2.5” hot-swap HDD or SSD; 500TB/1TB standard or enterprise SATA 80GB /160GB/256GB SATA SSD, 3-year warranty</td>
</tr>
</tbody>
</table>

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**Microservers for Scale-out Environments**

**Dell PowerEdge C Servers Portfolio Guide**

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**Description**

- The 3U PowerEdge C5000 chassis leverages fans, power supplies and other components across up to 12 single socket server nodes to offer 4x the density with 75% less to cool than equivalent 1U servers.
- Designed to increase revenue per square foot in your data center, the PowerEdge C5325 microserver has up to 12 single-socket server nodes for 4x the density with 75% less to cool in a hyper-efficient shared infrastructure 3U chassis.
- The SM10000-64 integrates 512 Intel Atom™ low-power cores, top of rack Ethernet switching, server management, and application load balancing in a single 10U “plug and play” standards-based server.

---

**Features**

- 4x density with 75% less to cool than traditional 1U servers
- Cold-aisle accessible, hot-swap high-efficiency 1400W power supplies and server nodes simplify serviceability and lower total cost of ownership
- 4x the density with 75% less to cool, 4x less floor space, cabling, racks compared to traditional 1U servers
- This microserver is right-sized for your workload and your wallet with value-priced AMD processors and shared infrastructure to maximize efficiency
- 1/4 the power, takes up 1/4 the space, uses fewer racks and switches compared to the best-in-class volume server, without requiring modifications to existing software. The industry’s first Rack in a Box,™ the SM10000-64 server’s shared infrastructure can significantly lower total cost of ownership.

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**Description**

- The SM10000-64 integrates 512 Intel Atom™ low-power cores, top of rack Ethernet switching, server management, and application load balancing in a single 10U “plug and play” standards-based server.
- Designed to increase revenue per square foot in your data center, the PowerEdge C5325 microserver has up to 12 single-socket server nodes for 4x the density with 75% less to cool in a hyper-efficient shared infrastructure 3U chassis.

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**Available Features**

- Up to 12 single-socket AMD or Intel processor-based server nodes (sleds) with 4 x 2.5” or 2 x 3.5” hard drive options; BMC with IPMI 2.0 support with 1 x 10/100 Mbps RJ45 connector for dedicated management, or 1 x NIC port shared.
- 4-12 single-socket server node sleds; 4 x 2.5” or 2 x 3.5” hard drive options; Linux and Windows OS; Citrix, and Microsoft Hyper-V.
Cloud Solutions
Easily deploy and manage on-demand cloud

DCS cloud solutions bring together pretested, pre-assembled and fully supported hardware, software and services. This turnkey approach enables you to easily and quickly deploy and manage an elastic, on-demand cloud infrastructure with confidence, with as little or as much outside support as you want along the way.

OpenStack™-Powered Cloud Solution
Stand up an OpenStack cloud in hours instead of days. This massively scalable open source Infrastructure as a Service (IaaS) cloud solution leverages OpenStack cloud software on Dell PowerEdge C servers, PowerConnect™ switches, Crowbar software framework, Dell OpenStack expertise, service and support. It’s open, compatible with other systems, and gives you the freedom to build the cloud of your dreams. Visit Dell.com/OpenStack or email Openstack@Dell.com to get started.

Crowbar Software Framework
Crowbar provides a framework that helps your organization accelerate deployment of a multi-node cloud on bare-metal servers from Dell or other hardware manufacturers. It’s designed to enable cloud deployment in as little as two hours, not days or weeks. The Crowbar framework also includes features that help you maintain and upgrade your cloud on an ongoing basis. It gives you the ability to update BIOS and RAID configurations, discover networks, receive alerts, gather performance data, and more.

Dell Cloud Solution for Web Applications
Take the guesswork out of building and running efficient public and private clouds with a turnkey cloud solution. The Dell Cloud Solution for Web Applications brings together optimized Dell PowerEdge C servers, PowerConnect switches, Joyent software, and joint services, so you can easily and quickly deploy and manage an elastic, on-demand cloud infrastructure with confidence, with as little or as much outside support as you want along the way. Find out more at Dell.com/dcswa.
Big Data Solutions
Gain deep business insights in seconds

Big data solutions bring together pre-tested, pre-assembled and fully supported hardware, software and services for you to gain deep business insights from your complex big data in seconds, with as little or as much support as you want along the way.

Apache Hadoop Solution
Leverage Hadoop to process massive application datasets. The Dell | Cloudera® solution combines Dell servers, Crowbar software framework and networking components with Cloudera’s Distribution, including Apache Hadoop (CDH), as well as management tools, training, technology support, and professional services. This Dell Apache Hadoop Solution gives you a one-stop shop for deploying, managing, and scaling a Hadoop cluster. Visit Dell.com/Hadoop to learn more.

Crowbar Software Framework
Crowbar provides a framework that helps your organization accelerate deployment of a multi-node cluster on bare-metal servers from Dell or other hardware manufacturers. It’s designed to enable deployment in as little as two hours, not days or weeks. The Crowbar framework also includes features that help you maintain and upgrade your cluster on an ongoing basis. It gives you the ability to update BIOS and RAID configurations, discover networks, receive alerts, gather performance data, and more.

Business Analytics Solutions
Unlock new business growth with Dell’s end-to-end business intelligence and data warehouse services. With Dell’s Business Analytics Solutions, you can integrate data silos to get an enterprise-wide view of information; increase operational efficiencies, improve product quality and cut costs while improving customer service; and reduce risk by detecting fraudulent activity and improving the accuracy of financial reporting. The Dell Services team can provide everything from business process strategy consulting and financial planning to IT solution design, implementation, management, training, and support. Organizations can select a project-based engagement or completely outsource management of the solution to Dell. Visit Dell.com/BI to learn more.
Dell is dedicated to simplifying IT, and Dell Services can help you manage the complexities of growing and maintaining your hyperscale, high-performance and cloud computing environments. Dell’s broad portfolio of planning, implementation and maintenance services can help accelerate your IT initiatives and grow your business.

**Infrastructure Consulting Services**

Dell global infrastructure consulting services utilize skilled solution architects, innovative tools, automated analysis and our own intellectual property to give you rapid insight into the root causes of unnecessary complexity. We seek better answers than traditional service models, based on our belief that solving problems should not need armies of people. Our strategy is to help customers quickly identify high-impact, short-duration projects that deliver ROI and free up resources to obtain competitive advantage. The result is practical, action-orientated plans with specific, predictable, measurable outcomes.

**Configuration and Deployment Services**

Dell configuration and deployment services don’t follow the traditional one-size-fits-all approach. They’re modular so you get to choose what you need for your business. Through features like flexible deployment options, configuration services, and recycling services, we’ve got what you need, when you need it. Our factory, remote, and onsite installation services make efficient use of time by speeding up activities like configuration and deployment, allowing you to focus more on improving your business.

**Dell Support Services**

Dell support services are a comprehensive, configurable suite of service solutions designed to simplify and optimize your data center environment. Data center support services address everyday and unique IT challenges through options that maximize system uptime and are backed by global command centers and expert centers around the world.
The power to do more.

Performance and efficiency at scale: Dell.com/PowerEdgeC
Cloud Solutions: Dell.com/cloud
Big Data Solutions: Dell.com/BI
Modular Data Centers: Dell.com/MDC
Dell Data Center Solutions: Dell.com/DCS